

# NON-PATENT LITERATURE

File 155:MEDLINE(R) 1951-2006/Jun 07  
 (c) format only 2006 Dialog  
 File 5:Biosis Previews(R) 1969-2006/Jun W1  
 (c) 2006 The Thomson Corporation  
 File 73:EMBASE 1974-2006/Jun 08  
 (c) 2006 Elsevier Science B.V.  
 File 94:JICST-EPlus 1985-2006/Mar W1  
 (c) 2006 Japan Science and Tech Corp(JST)  
 File 144:Pascal 1973-2006/May W2  
 (c) 2006 INIST/CNRS  
 File 162:Global Health 1983-2006/May  
 (c) 2006 CAB International  
 File 164:Allied & Complementary Medicine 1984-2006/Jun  
 (c) 2006 BLHCIS  
 File 467:ExtraMED(tm) 2000/Dec  
 (c) 2001 Informania Ltd.  
 File 34:SciSearch(R) Cited Ref Sci 1990-2006/May W4  
 (c) 2006 Inst for Sci Info  
 File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
 (c) 1998 Inst for Sci Info

Set	Items	Description
S1	2056327	MAGNET OR MAGNETS OR MAGNETIC OR MAGNETI?ABLE OR MAGNETI?ED
S2	3064573	IMPLANT? OR INJECT? OR IMBED? OR EMBED?
S3	252189	LUMEN OR LUMENS OR LUMINA OR LUMINAL OR (ANNULAR OR CONSTR- ICTION OR CONSTRICTING) ()MUSCLE? ?
S4	731919	PASSAGE? OR CAVITY OR CAVITIES
S5	1909643	SPHINCTER? ? OR ESOPHAG??? OR GASTROESOPHAG??? OR INTESTIN- ?? OR URETHRA? ? OR PHARYNX OR PHARYNGEAL
S6	14660	(FORCE OR PRESSURE) () (SENSOR OR SENSORS OR SENSING OR DETE- CTOR? ? OR DETECTING)
S7	436197	ELECTROMAGNET? OR ELECTRO()MAGNET??
S8	1450710	RING OR RINGS OR CIRCLE? ? OR RADIAL?? OR CIRCULAR OR ENCI- RCL???
S9	1665059	CONSTRICT? OR RESTRICT? OR SQUEEZ? OR NARROW???
S10	1753753	COMPRESS? OR CONTRACT? OR TIGHT?
S11	1704	S1(S)S2(S)S3:S5
S12	0	(S1(3N)S2)(5N)S3
S13	7526	S1(3N)S2
S14	11	S13(S)S3
S15	127	S13(S)S4:S5
S16	138	S14:S15
S17	92	RD (unique items)
S18	6	S17/2003
S19	3	S17/2004
S20	13	S17/2005
S21	1	S17/2006
S22	69	S17 NOT S18:S21
S23	12	S9:S10 AND S22
S24	16	S22 AND S6:S8
<b>S25</b>	<b>12</b>	<b>Sort S23/ALL/PY,A</b>
S26	12	S24 NOT S23
<b>S27</b>	<b>12</b>	<b>Sort S26/ALL/PY,A</b>
S28	45	S22 NOT S23:S24
<b>S29</b>	<b>45</b>	<b>Sort S28/ALL/PY,A</b>

25/7/1 (Item 1 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

05589158 PMID: 7280943

**Clinical applications of magnetic rings in colorectal anastomosis.**

Jansen A; Brummelkamp W H; Davies G A; Klopper P J; Keeman J N

Surgery, gynecology & obstetrics (UNITED STATES) Oct 1981, 153 (4)  
p537-45, ISSN 0039-6087--Print Journal Code: 0101370

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Based upon experiments on animals, an anastomotic apparatus, consisting of two **magnetic rings** of polymer bonded, rare earth cobalt **magnets embedded** in polyester, was developed. There are three types of polyester device with diameters of 25, 28, and 30 millimeters, respectively. The **force** between the **magnets** varied between 2.5 Newtons at 4 centimeter separation and 11.8 Newtons at union. For the low colorectal anastomosis, a **magnet holder**, connecting rod and spherical cap were developed. The aim of the technique is a quick restoration of the underbroken submucosal **intestinal** cylinder by optimal **circular** apposition of the submucosal layer. The working mechanism is based upon progressive **compression**, leading to necrosis of the intermediate mucosal and submucosal layers by increasing the **magnetic force** while **intestinal** healing takes place. After seven to 12 days, the **magnets** cut through the disappear from the anastomotic region by **intestinal** peristalsis. From the initial series of 21 patients, 11 resections of the sigmoid colon and nine low anterior resections were performed. Dehiscence of the suture line was noted in two instances. One patient required reoperation. The other patient had a small area of dehiscence at the suture line after evacuation of an infected hematoma with a further uncomplicated course. One patient died on the third postoperative day of recurrent myocardial infarction. In the other 18 patients, primary **intestinal** healing was demonstrated roentgenologically and sigmoidoscopically.

Record Date Created: 19811122

Record Date Completed: 19811122

25/7/10 (Item 10 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

12585313 PMID: 10619964

**A magnetic device for increasing the urethral resistance to flow: an experimental study in female dogs.**

Ali-El-Dein B; El-Demerdash R; Kock N G; Ghoneim M A

Urology & Nephrology Centre, University of Mansoura, Egypt.

BJU international (ENGLAND) Jan 2000, 85 (1) p150-4, ISSN 1464-4096

--Print Journal Code: 100886721

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

OBJECTIVE: To test a new **magnetic** device for increasing the **urethral** resistance to flow in a dog model, and thus provide a potential mechanical

device for the treatment of incontinence in women. MATERIALS AND METHODS: The study comprised 12 female mongrel dogs; three dogs were used to study the effect on **urethral** resistance of inserting a vaginal **magnet** (control experiment) and five were assessed in a urodynamic study. With the animals under general anaesthesia, the bladder and the **urethra** were exposed by a low midline incision. One **magnet**, **embedded** in a silicon layer, was placed on the anterior side of the **urethra** 3 cm distal to the bladder neck and fixed with a few sutures. To increase the **urethral** resistance as required, a second **magnet** was inserted into the vagina and the device activated. **Urethral pressure** profiles and leak-point **pressures** were recorded in the anaesthetized animals under resting conditions and after the **urethra** was **compressed** between the **magnets**. Recordings were also made after pharmacological blockade of the **urethral** musculature. In four additional dogs, chronic experiments were conducted to evaluate the effect of continuous **compression** of the **urethra** and the vaginal wall for 14 days. RESULTS: **Urethral compression** between the **magnets** resulted in a doubling of the maximal **pressure** in the proximal **urethra** and in a threefold increase of the leak-point **pressure**. After pharmacological denervation of the **urethra** the differences between the control **pressures** and those after activating the device were even greater, although not significantly so. After 2 weeks of continuous **compression** of the vaginal wall and the **urethra** between the **magnets** there was no **detectable** tissue damage. CONCLUSION: These results suggest that the **magnetic** device can efficiently increase **urethral pressure** and that prolonged **compression** caused no apparent damage to the **urethra** or vagina. It may therefore be a useful potential method of providing urinary continence in women.

Record Date Created: 20000224

Record Date Completed: 20000224

25/7/11 (Item 11 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2006 Inst for Sci Info. All rts. reserv.

10820305 Genuine Article#: 571FL Number of References: 125

**Title: Electrical stimulation for the treatment of bladder dysfunction:  
Current status and future possibilities**

Author(s): Jezernik S (REPRINT) ; Craggs M; Grill WM; Creasey G; Rijkhoff NJM

Corporate Source: Swiss Fed Inst Technol, Swiss Fed Inst Technol, Automat Control Lab, Phys Str 3, ETL K 28/CH-8092 Zurich//Switzerland/ (REPRINT); Swiss Fed Inst Technol, Swiss Fed Inst Technol, Automat Control Lab, CH-8092 Zurich//Switzerland/; Univ Coll London, Neurospinal Res Ctr, Stanmore/Middx/England/; Royal Natl Orthopaed Hosp, Stanmore HA7 4LP/Middx/England/; Case Western Reserve Univ, Dept Biomed Engr, Cleveland//OH/44106; Louis Stokes Cleveland Dept Vet Affairs Med Ctr, Cleveland//OH/; Univ Aalborg, Ctr **Sensory** Motor Interact, Dept Med Informat & Image Anal, Aalborg//Denmark/

Journal: NEUROLOGICAL RESEARCH, 2002, V24, N5 (JUL), P413-430

ISSN: 0161-6412 Publication date: 20020700

Publisher: FOREFRONT PUBL GROUP, C/O MARY J RAWLINS, 5 RIVER RD, STE 113, WILTON, CT 06897 USA

Language: English Document Type: REVIEW

Abstract: Electrical stimulation of peripheral nerves can be used to cause muscle **contraction**, to activate reflexes, and to modulate some functions of the central nervous system (neuromodulation). If applied to the spinal cord or nerves controlling the lower urinary tract,

electrical stimulation can produce bladder or **sphincter contraction**, produce micturition, and can be applied as a medical treatment in cases of incontinence and urinary retention. This article first reviews the history of electrical stimulation applied for treatment of bladder dysfunction and then focuses on the **implantable** Finetech-Brindley stimulator to produce bladder emptying, and on external and **implantable** neuromodulation systems for treatment of incontinence. We conclude by summarizing some recent research efforts including: (a) combined sacral posterior and anterior sacral root stimulator **implant** (SPARSI), (b) selective stimulation of nerve fibers for selective detrusor activation by sacral ventral root stimulation, (c) microstimulation of the spinal cord, and (d) a newly proposed closed-loop bladder neuroprosthesis to treat incontinence caused by bladder overactivity.

27/7/1 (Item 1 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

03924718 PMID: 1126293

[Colostomy continence achieved with an implanted circular magnet (author's transl)]

Kontinente Kolostomie durch **Magnetverschluss**

Feustel H; Hennig G

Deutsche medizinische Wochenschrift (1946) (GERMANY, WEST) May 9 1975,  
100 (19) p1063-4, ISSN 0012-0472--Print Journal Code: 0006723

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

A new method of providing a colostomy continent for faeces and gas is described. It consists of the subcutaneous **implantation** of a **magnetic ring** which is led outside through the **lumen** of the colon and sutured to the skin. The colostomy is closed with a **magnetic cover**. The procedure has been used in 17 patients with a permanent colostomy after rectal excision and has been highly successful.

Record Date Created: 19750807

Record Date Completed: 19750807

27/7/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

06020855 PMID: 6218687

[Controllable colostomy following abdomino-peritoneal extirpation of the rectum]

Upravliaemye kolostomy u bol'nykh, perenesshikh briushno-promezhnostnuu ekstirpatsiiu priamoi kishki.

Fedorov V D; Rykov V I; Obariuk T S; Amelin V M; Blagodarnyi L A

Voprosy onkologii (USSR) 1983, 29 (1) p30-4, ISSN 0507-3758--Print  
Journal Code: 0413775

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: RUSSIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Abdominoperineal extirpation of the rectum and formation of a controlled artificial **sphincter** were performed in 74 cases, following research conducted in 1978-1981. An artificial **sphincter** was formed from a fascial-muscular flap of musculus adductor magnus of the thigh in 35 cases; a **magnetic ring** was **implanted** in 39 cases. Indications for both surgical procedures and technical details are discussed. The good long-term functional results point to the effectiveness of the said procedures of surgical rehabilitation of cases of extirpation of the rectum.

Record Date Created: 19830317

Record Date Completed: 19830317

27/7/11 (Item 11 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2006 The Thomson Corporation. All rts. reserv.

0012671704 BIOSIS NO.: 200000390017

**Transintegumental power transformers with high permeability cores**

AUTHOR: Melvin David (Reprint); Henderson H Thurman; Helmicki Arthur J

AUTHOR ADDRESS: Cincinnati, OH, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1231 (5): Feb. 29, 2000 2000

MEDIUM: e-file

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Extra- to intra-corporeal power is provided by a transformer **implanted** at least partially within a defunctionalized **intestinal** pouch (or sack), such as an ileal pouch. The transformer includes a continuous loop **magnetic** core which is **implanted** within the pouch. The pouch itself includes a **passageway** permitting the secondary wiring to extend around the and through the **magnetic** core and through its central opening without **entering** the pouch providing intracorporeal current. Wire providing the primary windings extend from outside the body in through a stoma into the pouch and surround portions of the **magnetic** core within the pouch. Because of the use of a generally continuous loop **magnetic** core of high permeability, there is little or virtually no **magnetic** flux leakage. A solid **circular** core of a high permeability material may be used. In an alternate embodiment of the present invention the **magnetic** core can be divided into two separate portions, one **implanted** within the pouch and one **implanted** within the peritoneum adjacent the pouch so that the two core portions combine to form a generally continuous loop **magnetic** path, separated only by the **intestinal** wall of the pouch.

29/7/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

06152851 PMID: 6887423

**A magnetic urethral closure device: preliminary report of an experimental study.**

Gruneberger A D; Hennig G R

Journal of urology (UNITED STATES) Oct 1983, 130 (4) p798-801,

ISSN 0022-5347--Print Journal Code: 0376374

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

The new **magnetic urethral** closure system consists of a retropubically **implanted magnet** and another removable intravaginal **magnet**, thus gently closing the **urethra**. The device has shown its proper function in 12 sheep during a period of observation of up to 33 weeks. There were no technical defects. The **pressure** on the tissue can be modulated by the size and strength of the removable **magnet** and the **pressure** action time can easily be limited to the actual needs of the patient. Necrosis of the vagina wall and **urethra** have not been observed, using smooth-edged **magnets**.

Record Date Created: 19831028  
Record Date Completed: 19831028

29/7/4 (Item 4 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2006 Dialog. All rts. reserv.  
06352254 PMID: 6538609

**A magnet system for urethral closure in females.**

Gruneberger A D; Hennig G R; Bullemer F  
Journal of biomedical engineering (ENGLAND) Apr 1984, 6 (2) p102-6,  
ISSN 0141-5425--Print Journal Code: 7906074  
Publishing Model Print

Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

The **magnetic/urethral**-closure system consists of a retropubically **implanted magnet**, fixed to the inner rim of the symphysis pubica, and an intravaginal **magnet** which, by their mutual attraction, close the **urethra**. **Magnetic force/distance** characteristics of rare earth/cobalt **magnets** used for this purpose have been investigated with distances similar to those to be expected with the system in situ. Experiments on excised sheep **urethra** and bladder have shown proper function of the closure system up to a **urethral pressure** of more than 120 cm H2O. The system has also been tested in vivo in 16 Merino sheep.

Record Date Created: 19840522  
Record Date Completed: 19840522

29/7/6 (Item 6 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2006 Dialog. All rts. reserv.  
06665242 PMID: 3984560

**[Selection of the treatment method in rectal cancer]**

Die Auswahl der Behandlungsmethode beim Rektumkarzinom.  
Fedorov V D  
Zentralblatt fur Chirurgie (GERMANY, EAST) 1985, 110 (2-3) p98-107,  
ISSN 0044-409X--Print Journal Code: 0413645  
Publishing Model Print

Document type: Journal Article ; English Abstract  
Languages: GERMAN  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

From 1956 to 1982, 4126 patients suffering from rectal cancer underwent

surgery, 3229 of them had radical operations. The total postoperative mortality rate came up to 7.1% (n = 295) in the radical operated group it was 6.6% (n = 214). Between 1956 to 1982 continence preserving surgical procedures were constantly on the increase 1956: 46.4%, 1982: 66.8%). In 160 patients who underwent extirpation of the rectum with final colostomy a **closing magnetic device was implanted around the colostomy**. 40 patients who underwent a rectal pull through had a myoplastic operation to substitute a new anal **sphincter** using a portion of the adductor longus femoris muscle. Preoperative X-ray therapy (2000-3000 rad in 5 days) in 217 patients with rectal carcinoma yielded no significant improvement of the 5 years survival rate.

Record Date Created: 19850501

Record Date Completed: 19850501

29/7/7 (Item 7 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

07388013 PMID: 3603896

[Development of a magnetic urethral closure and initial clinical experiences]

Entwicklung eines **magnetischen Urethralverschlusses** und erste klinische Erfahrungen.

Gruneberger A D

Der Urologe. Aug. A (GERMANY, WEST) May 1987, 26 (3) p106-11,  
ISSN 0340-2592--Print Journal Code: 1304110

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The new **magnetic** closure device consists of a retropubically **implanted magnet** and another removable intravaginal **magnet**, which gently closes the **urethra**. The system has shown its proper function in animal experiments up to an **urethral pressure** of 120 cm water **pressure** and in an animal model - female merino sheep - during a period of observation up to 33 weeks. The first experiences with a **magnetic urethral** closure system in female patients with recurrent urinary incontinence, when common incontinence surgery is useless (no descensus, extremely hypotone **urethral** ), are promising. Continence can be achieved, the handling is easy and can be managed by intelligent and well motivated patients. The system has been used successfully in 7 patients carrying the **magnet** in the vagina over 8 h daily for up to 3 years.

Record Date Created: 19870730

Record Date Completed: 19870730

29/7/9 (Item 9 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

07674394 PMID: 3361765

[Implantation of a perineal magnetic closing device in the absence of the anal sphincter]

**Implantatsiia** promezhnostnogo megnitnogo zapiraiushchego ustroistva pri otsutstvii zhoma zadnego prokhoda.

Salamov K N; Dul'tsev Iu V; Protsenko V M; Egorkin M A; Markova E V

Khirurgiia (USSR) Feb 1988, (2) p122-6, ISSN 0023-1207--Print  
Journal Code: 0412765  
Publishing Model Print  
Document type: Journal Article  
Languages: RUSSIAN  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed  
Record Date Created: 19880602  
Record Date Completed: 19880602

29/7/11 (Item 11 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2006 Dialog. All rts. reserv.  
07995002 PMID: 2914527

**Treatment of patients with rectal cancer.**

Fedorov V D; Shelygin Y A

Research Institute of Proctology, Moscow, USSR.

Diseases of the colon and rectum (UNITED STATES) Feb 1989, 32 (2)  
p138-45, ISSN 0012-3706--Print Journal Code: 0372764

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

During a 20-year period (1965 to 1985), 4673 patients with rectal cancer underwent surgical treatment, with 3500 of them being subjected to radical surgery. Postoperative mortality was 6.1 percent. During the last five years, the mortality rate decreased dramatically down to 4.9 percent, despite an increase in the group of elderly patients (35.7 percent) and performance of a considerable percentage of simultaneous, extensive, and combined operations (33.7 percent). The trend of employing **sphincter**-saving operations (in more than 60 percent of patients, the anterior resection and abdominoanal resection with a pull-through were performed) accounts for the favorable five-year survival rate (62 to 69 percent) and results in a good functional outcome in 80 percent of patients. The use of a combination of conservative and operative methods of rehabilitation contributes to the professional readaptation of 75 to 80 percent of patients after surgery with construction of a stoma. In 223 cases, a **Soviet magnetic occlusive device was implanted**, while in 67 patients an artificial **sphincter** mechanism was constructed from the flap of the adductor longus femoris muscle. It should be emphasized that surgical methods of rehabilitation are used both in primary and reconstructive operations. The experience with management of 124 patients with recurrent cancer after resection and extirpation of the rectum shows that local excision or repeated resections of the rectum cure 20 to 29 percent of those operated on.

Record Date Created: 19890321

Record Date Completed: 19890321

29/7/14 (Item 14 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2006 Dialog. All rts. reserv.  
09048205 PMID: 1761176

[Modification of the use of a magnetic device for urethral occlusion in recurrent incontinence]



Modifikation der Anwendung der **Magnetschale** des Harnrohrenverschlusses bei Rezidiv-Inkontinenz.

Gruneberger A D

Kreiskrankenhaus Wangen.

Geburtshilfe und Frauenheilkunde (GERMANY) Oct 1991, 51 (10) p850-2,  
ISSN 0016-5751--Print Journal Code: 0370732

Publishing Model Print

Document type: Case Reports; Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The **magnetic** closure device consists of a bow-shaped retropubically **implanted magnet**. Another removable **magnet** is situated in the vagina, thus gently closing the **urethra**. The modification described herein consists of colposuspension over the upper edge of the **implanted magnet**. Continence was thus achieved. The use of the intravaginal **magnet** was not necessary. The case report deals with the first two patients.

Record Date Created: 19920210

Record Date Completed: 19920210

29/7/22 (Item 22 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

09740670 PMID: 8368032

[Development of a magnetic urethral closure device--an animal experiment study]

Entwicklung eines **magnetischen Urethralverschlusses**--eine tierexperimentelle Studie.

Gruneberger A D; Hennig G R

Zentrum fur Gynakologie und Geburtshilfe, Universitat Ulm und Munchen-Gauting.

Zentralblatt fur Gynakologie (GERMANY) 1993, 115 (7) p328-31,  
ISSN 0044-4197--Print Journal Code: 21820100R

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The new **magnetic** closure device consists of a retropubically **implanted magnet** and another removable intravaginal **magnet**, which gently closes the **urethra**. This system has shown its proper function in Merino sheep during a period of observation up to 33 weeks. The **pressure** on the tissue can be adjusted by the size and strength of the removable **magnet**. By using smooth-edged **magnets**, no necrosis of the vaginal wall and **urethra** could be observed.

Record Date Created: 19931007

Record Date Completed: 19931007

29/7/26 (Item 26 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

10037476 PMID: 8174918

[Magnetic closure with colposuspension in complicated recurrent incontinence]  
Magnetverschluss mit Kolposuspension bei komplizierter Rezidivinkontinenz.

Gruneberger A D  
Gynakologisch/Geburtshilfliche Abteilung, Krankenhauses Wangen/Allgau.  
Geburtshilfe und Frauenheilkunde (GERMANY) Feb 1994, 54 (2) p80-3,  
ISSN 0016-5751--Print Journal Code: 0370732

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The **magnetic sphincter** consists of a bow shaped retropubical **implanted magnet** , fixed on the inner rim of the symphysis. Another removable **magnet** is installed in the vagina, both gently closing the **urethra** . 31 patients with severe recurrent stress incontinence after repeated operations (hypotone **urethra** mean=17 cm H2O upp rest, mean=59 years) were operated on with the **magnetic sphincter** system. 16 patients have been operated with this method, getting a curing rate of 12.4 continent patients do not use to vaginal **magnet** because of complaints. This system has now been modified. The modification described herein consists of a colposuspension over the upper edge of the **implanted magnet**. With this modification, 12 of the patients became continent, 10 resulting from the colposuspension alone, 2 became adequately continent with the additional intravaginal **magnet**. The idea of a colposuspension over the upper edge of the **magnetic implant** is convincing by its success in recurrent stress incontinence, and gives the possibility to increase the continence rate by using the intravaginal **magnet**. The operation is easy to perform and the result effective.

Record Date Created: 19940606

Record Date Completed: 19940606

File 357:Derwent Biotech Res. \_1982-2006/Jun W1  
(c) 2006 The Thomson Corp.  
File 358:Current BioTech Abs 1983-2006/Jan  
(c) 2006 DECHEMA  
File 2:INSPEC 1898-2006/May W4  
(c) 2006 Institution of Electrical Engineers  
File 6:NTIS 1964-2006/May W3  
(c) 2006 NTIS, Intl Cpyrght All Rights Res  
File 8:Ei Compendex(R) 1970-2006/May W4  
(c) 2006 Elsevier Eng. Info. Inc.  
File 65:Inside Conferences 1993-2006/Jun 07  
(c) 2006 BLDSC all rts. reserv.  
File 431:MediConf: Medical Con. & Events 1998-2004/Oct B2  
(c) 2004 Dr. R. Steck

Set	Items	Description
S1	1274030	MAGNET OR MAGNETS OR MAGNETIC OR MAGNETI?ABLE OR MAGNETI?ED
S2	641095	IMPLANT? OR INJECT? OR IMBED? OR EMBED?
S3	6976	LUMEN OR LUMENS OR LUMINA OR LUMINAL OR (ANNULAR OR CONSTR- ICTION OR CONSTRICTING) ()MUSCLE? ?
S4	247824	PASSAGE? OR CAVITY OR CAVITIES
S5	24630	SPHINCTER? ? OR ESOPHAG??? OR GASTROESOPHAG??? OR INTESTIN- ?? OR URETHRA? ? OR PHARYNX OR PHARYNGEAL
S6	18428	(FORCE OR PRESSURE) () (SENSOR OR SENSORS OR SENSING OR DETE- CTOR? ? OR DETECTING)
S7	493616	ELECTROMAGNET? OR ELECTRO()MAGNET??
S8	648575	RING OR RINGS OR CIRCLE? ? OR RADIAL?? OR CIRCULAR OR ENCI- RCL???
S9	452825	CONSTRICT? OR RESTRICT? OR SQUEEZ? OR NARROW???
S10	668181	COMPRESS? OR CONTRACT? OR TIGHT?
S11	977	S1(S)S2(S)S3:S5
S12	365	S11(S)S6:S10
S13	112	(S1(3N)S2)(S)S3:S5
S14	88	RD (unique items)
S15	1	S14/2003
S16	1	S14/2004
S17	8	S14/2005
S18	2	S14/2006
S19	76	S14 NOT S15:S18
S20	27	S19 AND S6:S10
S21	27	Sort S20/ALL/PY,A [not relevant]
S22	49	S19 NOT S20
S23	8	(S3 OR S5 OR S4(5N)(BODY OR PATIENT? ?))(S)S22

23/7/7 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

02975417 INSPEC Abstract Number: A83009778

**Title: A magnet-system for treatment of female urinary incontinence**

Author(s): Gruneberger, A.D.; Hennig, G.; Bollemer, F.

Author Affiliation: Ulm Univ., Ulm, West Germany

Journal: Biomedizinische Technik vol.27, no.10 p.238-42

Publication Date: Oct. 1982 Country of Publication: West Germany

CODEN: BMZTA7 ISSN: 0013-5585

Language: German Document Type: Journal Paper (JP)

Treatment: New Developments (N); Practical (P)

Abstract: A new magnetic urethral -closure system is described

consisting of a **magnet** retropubically **implanted** and fixed to the symphysis pubica and an intravaginal **magnet** thus closing the **urethra** in between. **Magnetic force-distance** characteristics of samarium-cobalt-**magnets** have been investigated over the distances that the **magnets** act on the **urethra** in situ. The experiments showed proper functioning of the closure system up to a **urethral pressure** of 120 cm H/sub 2/O. (22 Refs)

Subfile: A

23/7/8 (Item 1 from file: 6)

DIALOG(R) File 6:NTIS

(c) 2006 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

2257372 NTIS Accession Number: ADA409550/XAB

**New Magnetic Device for the Identification of Endotracheal Tube Position**  
(Conference paper)

Pan, W. ; Lou, J. ; Zhang, Y. T. ; Jin, X.  
Zhejiang Univ., Hangzhou (China).

Corp. Source Codes: 072049000; 425728

25 Oct 2001 5p

Languages: English

Journal Announcement: USGRDR0311

Papers from the 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, October 25-28, 2001, held in Istanbul, Turkey. See also ADM001351 for entire conference on cd-rom.

Product reproduced from digital image. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)605-6900; and email at orders@ntis.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A01/MF A01

Country of Publication: China

A new device for **detecting** the position of endotracheal tube is presented in this paper. This device consists of a high sensitive linear Hall- effect **sensor** and a newly designed endotracheal tube in which two small **magnets** are **embedded**. The Hall-effect **sensor** can be placed on the skin of neck over the vocal cord to **detect** the position of endotracheal tube by measuring the strength of its **magnetic** field when the **magnet** on tube passes through the glottis during intubation. The results of our clinical tests on 38 cases of endotracheal intubation and 15 controls of **esophageal** intubation how that the device is sensitive to verify the **esophageal** intubation, and that it provides a useful means for clinician to control the inserted length easily. Due to its unique principle of operation, the **detector** can be applied to all kinds of patients, especially in pre-hospital sites.

File 149:TGG Health&Wellness DB(SM) 1976-2006/May W3  
 (c) 2006 The Gale Group  
 File 148:Gale Group Trade & Industry DB 1976-2006/Jun 07  
 (c)2006 The Gale Group  
 File 16:Gale Group PROMT(R) 1990-2006/Jun 07  
 (c) 2006 The Gale Group  
 File 160:Gale Group PROMT(R) 1972-1989  
 (c) 1999 The Gale Group  
 File 9:Business & Industry(R) Jul/1994-2006/Jun 06  
 (c) 2006 The Gale Group  
 File 635:Business Dateline(R) 1985-2006/Jun 07  
 (c) 2006 ProQuest Info&Learning  
 File 636:Gale Group Newsletter DB(TM) 1987-2006/Jun 06  
 (c) 2006 The Gale Group  
 File 129:PHIND(Archival) 1980-2006/May W4  
 (c) 2006 Informa UK Ltd  
 File 135:NewsRx Weekly Reports 1995-2006/May W4  
 (c) 2006 NewsRx

Set	Items	Description
S1	70473	MAGNET OR MAGNETS OR MAGNETIC() (PARTICLES OR POWDER) OR MAGNETI?ABLE OR MAGNETI?ED
S2	904158	IMPLANT? OR INJECT? OR IMBED? OR EMBED?
S3	20023	LUMEN OR LUMENS OR LUMINA OR LUMINAL OR (ANNULAR OR CONSTRUCTION OR CONSTRICTING) ()MUSCLE? ?
S4	4454	(PASSAGE? OR CAVITY OR CAVITIES) (5N) (BODY OR PATIENT? ?)
S5	72227	SPHINCTER? ? OR ESOPHAG??? OR GASTROESOPHAG??? OR INTESTIN-?? OR URETHRA? ? OR PHARYNX OR PHARYNGEAL
S6	10339	(FORCE OR PRESSURE) () (SENSOR OR SENSORS OR SENSING OR DETECTOR? ? OR DETECTING)
S7	55941	ELECTROMAGNET? OR ELECTRO()MAGNET??
S8	837946	RING OR RINGS OR CIRCLE? ? OR RADIAL?? OR CIRCULAR OR ENCIRCL???
S9	1431632	CONSTRICT? OR RESTRICT? OR SQUEEZ? OR NARROW???
S10	5419079	COMPRESS? OR CONTRACT? OR TIGHT?
S11	2	(S1(3N)S2)(10N)S3:S5
S12	18	S1(S)S2(S)S3:S5
S13	7	S6:S10(S)S12
S14	5	S13 NOT S11
S15	3	RD (unique items)
S16	11	S12 NOT (S11 OR S13)
S17	7	RD (unique items)
S18	7	Sort S17/ALL/PD,A

11/7/1 (Item 1 from file: 160)  
 DIALOG(R) File 160:Gale Group PROMT(R)  
 (c) 1999 The Gale Group. All rts. reserv.  
 00328625

**Magnetic medicine: Small magnetic 'bullets' implanted in an 18-mo old boy born with a congenital defect--an incompletely formed esophagus--enabled surgeons to finally cure the defect.**

Technology Review February, 1976 p. 21

The tiny magnets were implanted in each end of his incomplete esophagus, initially several cm apart, and the boy was placed in an intermittent electromagnetic field. The magnets gradually stretched the two ends until they were close enough for the surgeons to join them. This magnetic technique may also help cure other defects, such as imperforate anus.

15/3,K/2 (Item 2 from file: 149)  
DIALOG(R) File 149:TGG Health&Wellness DB(SM)  
(c) 2006 The Gale Group. All rts. reserv.  
01310785 SUPPLIER NUMBER: 11492580 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Dynamic graciloplasty for treatment of faecal incontinence.**  
Baeten, C.G.M.I.; Konsten, J.; Spaans, F.; Visser, R.; Habets, A.M.M.C.;  
Bourgeois, I.M.; Wagenmakers, A.J.M.; Soeters, P.B.  
The Lancet, v338, n8776, p1163(3)  
Nov 9, 1991  
PUBLICATION FORMAT: Magazine/Journal ISSN: 0099-5355 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional  
WORD COUNT: 1659 LINE COUNT: 00182  
...ABSTRACT: different causes. The physical causes of fecal incontinence  
include spinal cord damage, damage to the **sphincter** muscle, congenital  
abnormalities of the anus, and removal of the **sphincter** as a part of  
treatment for cancer. One proposed treatment for fecal incontinence that is  
...  
...from its normal site of attachment and wrapped around the rectum, either  
at the normal **sphincter** site or at the new site if the patient has had a  
new anus created surgically. **Tightening** of this muscle closes the opening  
and restores continence. Unfortunately, this leg muscle is of the type  
physiologists call rapid twitch; the gracilis is designed to **contract**  
rapidly and powerfully, but is less suited to sustained **contraction** and  
tires easily. In an attempt to solve the problem of fatigue, researchers  
have now...  
...complete fecal incontinence; in addition to the relocation of the  
muscle, an electrical stimulator was **implanted** that would maintain the  
tension of the muscle, and hence the continence, without any voluntary...  
...patient. The electrical stimulator utilizes a **magnetic** switch; when the  
patient wishes to defecate, a **magnet** is held near the **implanted**  
stimulator, turning it off and relaxing the surgically created **sphincter** .  
In eight of the 10 patients who received this treatment, continence was  
restored immediately. Two...  
... to an external stimulator; at this site intramuscular electrodes  
( 'SP 5528', Medtronic, Kerkrade, Netherlands) were **implanted** . The  
electrodes were then tunnelled to the lower abdomen and connected with an  
**implantable** stimulator ( 'Itrel 7420', Medtronic, Minnesota, USA), which  
was placed in a subcutaneous pocket. The muscle was activated immediately  
after **implantation** , with intermittent mode electrical stimulation for 8  
weeks. The pulse width was 210 [microsec], frequency...  
...with telemetry. This procedure can be regarded as an "in-service  
training" of the new **sphincter** . The output of the electrical stimulator  
and thus the tonic **contractions** of the new **sphincter** could be switched  
"off" with a **magnet** to allow defaecation at a convenient time...

15/3,K/3 (Item 1 from file: 16)  
DIALOG(R) File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.  
02831830 Supplier Number: 43807645  
**Pacemaker-like Implant Helps Control Incontinence**  
Medical World News, p14  
May, 1993  
Language: English Record Type: Abstract

Document Type: Magazine/Journal; Professional

ABSTRACT:

...fecal incontinence has been developed by Dr Massimo Seccia of the U of Pisa. The **implant** is used to control a muscle transplanted from the thigh to replace a malfunctioning **sphincter**. The **Implantable** Pulse Generator (IPG) can make the muscle **contract** with something under 3 volts. The device must be turned off to let the muscle relax in order to defecate. The IPG is switched on an off with an external **magnet**. The device has been tested successfully in 14 of 15 attempts. Patients who may not...  
...frequency range to hear a static produced by the device when it is on. The **implant** has a battery that lasts 5 years...

18/3,K/3 (Item 3 from file: 149)

DIALOG(R)File 149:TGG Health&Wellness DB(SM)

(c) 2006 The Gale Group. All rts. reserv.

01372364 SUPPLIER NUMBER: 12902666 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Electrically stimulated gracilis sphincter for treatment of bladder sphincter incontinence.**

Janknegt, R.A.; Baeten, C.G.M.I.; Weil, E.H.J.; Spaans, F.

The Lancet, v340, n8828, p1129(2)

Nov 7, 1992

PUBLICATION FORMAT: Magazine/Journal ISSN: 0099-5355 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional

WORD COUNT: 1744 LINE COUNT: 00150

ABSTRACT: Reconstruction of the bladder **sphincter** using electrically-stimulated gracilis muscle may restore continence in patients suffering from complete urinary incontinence...

...thigh, is attached surgically to the neck of the bladder and is stimulated by an **implanted** electrode turned off and on by a **magnet**. Among three patients with complete urinary incontinence who underwent surgery, continence was restored in two...

...risk of infection may be lower in these patients than in those with an artificial **sphincter implanted** in their bladder.

AUTHOR ABSTRACT: Correction of total urinary incontinence due to **sphincter** damage is done with an artificial **sphincter** prosthesis or urinary diversion. In this pilot study we used graciloplasty around the bladder neck followed by electrical stimulation of this muscle with an **implanted** stimulator, which could be switched off and on by a **magnet**. Stimulus variables could be changed externally. With the stimulator on, **urethral pressures** of about 50 cm [H.sub.O] were obtained. Of three patients who underwent...

18/3,K/4 (Item 4 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2006 The Gale Group. All rts. reserv.

02417692 Supplier Number: 44801330 (USE FORMAT 7 FOR FULLTEXT)

**Market and Technology Updates**

The BBI Newsletter, v27, n7, pN/A

July, 1994

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 1165

... as patient transport. TREK is also waiting for 510(k) approval of its On-Command **magnet**-based male retention/urinary incontinence

indwelling catheter and anticipates a mid-1994 launch. The On...  
...catheter features a check valve that prevents the flow of urine until a matchbook-sized **magnet** is placed next to the penis, allowing the flow of urine. The catheter is placed within the **urethra** and may be left for up to 30 days. Studies have shown the On-Command...  
...assays includes those used for therapeutic drug monitoring, metabolic, cardiovascular, pregnancy, fertility and thyroid testing. **Implantable** Device Treats Epilepsy CYBERONICS (Webster, TX) has received approval to market in the European Community (EC), its **implantable** vagus nerve stimulation device for treating epilepsy. In the 12 EC countries combined, more than...  
...vagus nerve stimulation using CYBERONICS' NeuroCybernetic prosthesis (NCP) system. The NCP system consists of an **implantable** pulse signal generator and a stimulation lead that is surgically attached to the left vagus...  
...stimuli that can trigger epileptic seizures and possibly other neurologic disorders. NCP systems have been **implanted** in more than 250 patients in the U.S., Europe and Japan. On-demand Therapy...  
...and 1997. BBI's Report #1205, "U.S. Markets for High-Tech Cardiac Devices and **Implants**," published December 1993, is available. Contact the BBI Sales Department, (714) 755-5757; fax (714...

18/3,K/5 (Item 5 from file: 149)  
DIALOG(R)File 149:TGG Health&Wellness DB(SM)  
(c) 2006 The Gale Group. All rts. reserv.  
01605201 SUPPLIER NUMBER: 17623503 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Towards even fewer colostomies....(Commentary)**  
Banerjee, Anjan; Shorthouse, Andrew  
The Lancet, v346, n8979, p859(1)  
Sept 30, 1995  
PUBLICATION FORMAT: Magazine/Journal ISSN: 0099-5355 LANGUAGE: English  
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional  
WORD COUNT: 983 LINE COUNT: 00079

**Sphincter** preservation is therefore largely replacing **sphincter** excision for cancer of the mid and lower rectum, and also for ulcerative colitis and...  
...techniques has led to a reduction in the formation of permanent stomas.[8] However, where **sphincter** excision is unavoidable, or in cases of anal agenesis, creation of a neo- **sphincter** is the next logical step. Whilst adductor longus,[9] gluteus maximus,[10] and obturator internus...  
...until Williams and co-workers[13] transposed the gracilis muscle to the anus, with the **implantation** of stimulating electrodes, that results improved; this procedure led to the transformation of fast-twitch...  
...the anal canal and fixed to the ischial spine. 6 weeks later, intramuscular electrodes are **implanted** at the site of nerve entry and connected through a subcutaneous tunnel to a neurostimulator controlled by an external **magnet**, which is placed in the abdominal wall...



## FOREIGN AND INTERNATIONAL PATENTS

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200636

(c) 2006 The Thomson Corp.

File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)

(c) 2006 JPO & JAPIO

Set	Items	Description
S1	282465	MAGNET OR MAGNETS OR MAGNETIC() (PARTICLES OR POWDER) OR MAGNETI?ABLE OR MAGNETI?ED
S2	845664	IMPLANT? OR INJECT? OR IMBED? OR EMBED?
S3	18428	LUMEN OR LUMENS OR LUMINA OR LUMINAL OR (ANNULAR OR CONSTRUCTION OR CONSTRICTING) ()MUSCLE? ?
S4	47684	(PASSAGE? OR CAVITY OR CAVITIES) (5N) (BODY OR PATIENT? ?)
S5	30818	SPHINCTER? ? OR ESOPHAG??? OR GASTROESOPHAG??? OR INTESTIN-?? OR URETHRA? ? OR PHARYNX OR PHARYNGEAL
S6	76613	(FORCE OR PRESSURE) () (SENSOR OR SENSORS OR SENSING OR DETECTOR? ? OR DETECTING)
S7	292223	ELECTROMAGNET? OR ELECTRO()MAGNET??
S8	1375264	RING OR RINGS OR CIRCLE? ? OR RADIAL?? OR CIRCULAR OR ENCI-RCL???
S9	452175	CONSTRICT? OR RESTRICT? OR SQUEEZ? OR NARROW???
S10	1016250	COMPRESS? OR CONTRACT? OR TIGHT?
S11	66	S1(S)S2(S)S3:S5
S12	6	S11(S)S9:S10
S13	15	S11 AND S6:S8
S14	15	S13 NOT S12
S15	11	S3:S5/TI AND S11
S16	6	S15 NOT S12:S13
S17	39	S11 NOT S12:S16
S18	1713	S9:S10(3N)S3:S5
S19	2	S1(5N)S2 AND S18
S20	0	S19 NOT S11

12/3/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

017473632 \*\*Image available\*\*

WPI Acc No: 2005-797311/200581

**Urethral occlusive assembly used for preventing urinary incontinence in males and females, includes implant component including flexible bridge member connecting two opposed implant supports, and external component**

Patent Assignee: NOVATEK MEDICAL LLC (NOVA-N); NOVA TEK MEDICAL LLC (NOVA-N)

Inventor: ANDERSON D W; TIMM G W

Number of Countries: 110 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 2005110281	A2	20051124	WO 2005US15971	A	20050506	200581 B
US 20050267324	A1	20051201	US 2004569420	P	20040507	200581
			US 2004600613	P	20040811	
			US 2005122827	A	20050505	

Priority Applications (No Type Date): US 2005122827 A 20050505; US

2004569420 P 20040507; US 2004600613 P 20040811

International Patent Class (Main): A61F-002/04

12/3,K/3 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 The Thomson Corp. All rts. reserv.  
013610040  
WPI Acc No: 2001-094248/200111  
XRAM Acc No: C01-027945

**Magnetic controller of incontinence consists of a permanent magnet system attracting a ferromagnetic material, made as an implant**

Patent Assignee: IBARRA GARCIA M R (GARC-I)  
Number of Countries: 001 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
ES 2150875	A1	20001201	ES 9970	A	19990111	200111 B
ES 2150875	B1	20010816	ES 9970	A	19990111	200158

Priority Applications (No Type Date): ES 9970 A 19990111

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
ES 2150875	A1	1	A61F-002/48	
ES 2150875	B1		A61F-002/48	

Abstract (Basic):

... The **magnetic** controller of incontinence comprises an **implant** serving as a **urethral sphincter** enhancing **compression**. A permanent **magnet** attracts a ferromagnetic material, to eliminate incontinence.

12/3,K/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 The Thomson Corp. All rts. reserv.  
010967028 \*\*Image available\*\*  
WPI Acc No: 1996-463977/199646

**Implantable urethral sphincter for occluding urethral in human being - removes external magnet from skin over implant to allows bellows to expand, thus opening urethral cuff**

Patent Assignee: WHALEN BIOMEDICAL INC (WHAL-N)  
Inventor: SARRASIN M J; WHALEN R L  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5562598	A	19961008	US 94309144	A	19940920	199646 B

Priority Applications (No Type Date): US 94309144 A 19940920

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5562598	A	8	A61F-002/02	

...Abstract (Basic): The device includes An external **magnet** for achieving closure of the **urethral** cuff. A hydraulically operated silicone rubber **sphincter** cuff. The device also includes a connecting tube, and an elastomeric bellows assembly. The device is closed by an external **magnet** placed on the skin over the **implanted** reservoir assembly. When the external **magnet** is in place the elastomeric bellows of the reservoir is **compressed**, and the prosthetic **sphincter** is closed. Removal of the external **magnet** from the skin over the **implant** allows the bellows to expand, thus opening the **urethral** cuff...

12/3,K/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 The Thomson Corp. All rts. reserv.  
004320887  
WPI Acc No: 1985-147765/198525  
XRAM Acc No: C85-064246  
XRPX Acc No: N85-111490

**Implanted valve for urethra - comprises elastomer sleeve contg. normally closed slit to be opened by pressure**

Patent Assignee: ESKA MED & KUNSTSTO (ESKA-N); KOSS W (KOSS-I)  
Inventor: JONAS U  
Number of Countries: 005 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 144699	A	19850619	EP 84112991	A	19841027	198525 B
US 4643169	A	19870217	US 84665107	A	19841026	198709
EP 144699	B	19910313				199111
DE 3484268	G	19910418				199117

Priority Applications (No Type Date): DE 83U31338 U 19831102  
Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 144699	A	G 28		
Designated States (Regional): DE FR GB SE				
EP 144699	B			
Designated States (Regional): DE FR GB SE				

...Abstract (Basic): A valve **implant** for controlling the **urethra** in case of incontinence comprises an elastomer sleeve (2) to be fitted around the **urethra** . This sleeve (1, 2) is of stable form and contains within it, esp. supported by gel cushions (4), a **narrow** slit (5) which normally keeps the **urethra** closed. **Pressure** at top and bottom (3, 6) opens this slit. The **pressure** can be exerted either manually or by remote control according to the position of the **implant** . Pref., the sleeve is composed of two half-shells, joined together by a flexible hinge...

...film of the same material, and having their opposite ends (6) sewn together, connected by **magnets** or otherwise closed...

**14/3,K/2 (Item 2 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 The Thomson Corp. All rts. reserv.  
017030232 \*\*Image available\*\*  
WPI Acc No: 2005-354550/200536

**Upper gastrointestinal implant for treating obesity, particularly morbid obesity, has elongate tubular body with proximal and distal ends, funnel opening, and support structure**

Patent Assignee: BALLIRO J (BALL-I); CARR-LOCKE D (CARR-I); DANN M (DANN-I); GUTERMAN L (GUTE-I); IKRAMUDDIN S (IKRA-I); KAGAN J (KAGA-I); LEARY J (LEAR-I); THOMAS R (THOM-I)  
Inventor: BALLIRO J; CARR-LOCKE D; DANN M; GUTERMAN L; IKRAMUDDIN S; KAGAN J; LEARY J; THOMAS R  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20050096750	A1	20050505	US 2002422987	P	20021101	200536 B
			US 2002428483	P	20021122	
			US 2002430857	P	20021203	

US 2002437513 P 20021230  
US 2003448817 P 20030221  
US 2003480485 P 20030621  
US 2003698148 A 20031031  
US 2004998424 A 20041129

Priority Applications (No Type Date): US 2004998424 A 20041129; US  
2002422987 P 20021101; US 2002428483 P 20021122; US 2002430857 P 20021203  
; US 2002437513 P 20021230; US 2003448817 P 20030221; US 2003480485 P  
20030621; US 2003698148 A 20031031

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20050096750	A1		106	A61F-002/04	Provisional application US 2002422987 Provisional application US 2002428483 Provisional application US 2002430857 Provisional application US 2002437513 Provisional application US 2003448817 Provisional application US 2003480485 Cont of application US 2003698148

Abstract (Basic): US 20050096750 A1

NOVELTY - An upper gastrointestinal **implant** comprises an elongate tubular body having a proximal end and a distal end; a funnel opening on the proximal end; and a support structure spaced distally apart from the proximal end. It is dimensioned such that the proximal end is positioned in between an antrum and a lower **esophageal sphincter** when the support structure is positioned in the antrum.

...(5) a method of positioning a tubular **implant** within an **intestine** of a patient, comprising providing the elongate tubular body having a proximal end, a distal end and a first **magnet** secured to the distal end; trans-**esophageally** introducing the distal end into the stomach; advancing the distal end into the pylorus; and advancing the distal end from the pylorus into the **intestine**, where at least the advancing step is accomplished using a second **magnet** external to the patient.

International Patent Class (Main): A61F-002/04

14/3/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 The Thomson Corp. All rts. reserv.  
016531656

WPI Acc No: 2004-690222/200467

**Device useful for engaging or compressing a body lumen comprises a first layer containing electroactive polymer, and second layer**

Patent Assignee: HEGDE A V (HEGD-I); KARABEY H I (KARA-I); PAVAD MEDICAL INC (PAVA-N)

Inventor: HEGDE A V; KARABEY H I; HEDGE A V

Number of Countries: 108 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200478025	A2	20040916	WO 2004US4820	A	20040218	200467 B
US 20040230090	A1	20041118	US 2002416477	P	20021007	200477
			US 2003451212	P	20030228	
			US 2003681821	A	20031007	
			US 2004781357	A	20040217	

Priority Applications (No Type Date): US 2004781357 A 20040217; US  
2003451212 P 20030228; US 2003681821 A 20031007; US 2002416477 P 20021007

14/7/6 (Item 6 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

004423207

WPI Acc No: 1985-250085/198541

Tampon for artificial intestine outlet - with permanent magnet pin  
housed in blind hole of plug to cooperate with implanted magnetic ring

Patent Assignee: LEHR A VD (VLEH-I); LEHR A (LEHR-I)

Inventor: LEHR A

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3410715	A	19851003	DE 3410715	A	19840323	198541 B
DE 3410715	C	19920507	DE 3410715	A	19840323	199219

Priority Applications (No Type Date): DE 3410715 A 19840323

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3410715	A		10		
DE 3410715	C		4		

Abstract (Basic): DE 3410715 A

A tampon for closing the outlet of an artificial **intestine** comprises a longitudinal central bore for housing a permanent **magnet** pin to cooperate with an **implanted magnetic ring**. The bore has the form of a blind hole. Pref., it extends to within 15 mm of the proximal end (inner end) of the tampon. This proximal end may be fitted with a rounded closure cap, esp. centered by a stud and fixed by adhesive.

USE/ADVANTAGE - As a tampon for an artificial **intestine** outlet. Such tampons are designed to be entirely handled by the wearer, and this includes changing of the tampon and therefore insertion of the **magnetic** pin into a new tampon. With the arrangement described, there is no risk of the pin coming out and causing serious injury.

0/1

Abstract (Equivalent): DE 3410715 C

A tampon for closing the outlet of an artificial **intestine** comprises a longitudinal central bore for housing a permanent **magnet** pin to cooperate with an **implanted magnetic ring**. The bore has the form of a blind hole. Pref., it extends to within 15 mm of the proximal end (inner end) of the tampon. This proximal end may be fitted with a rounded closure cap, esp. centered by a stud and fixed by adhesive.

USE/ADVANTAGE - As a tampon for an artificial **intestine** outlet. Such tampons are designed to be entirely handled by the wearer, and this includes changing of the tampon and therefore insertion of the **magnetic** pin into a new tampon. With the arrangement described, there is no risk of the pin coming out and causing serious injury. (10pp

Dwg.No.0/1

Derwent Class: D22; E12; P32; P34

International Patent Class (Additional): A61F-005/44; A61F-013/20;

A61L-015/00

14/7/9 (Item 9 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

002246619

WPI Acc No: 1979-45815B/197925

**Magnetic plug for closing prosthetic bowel outlet - is magnetic ring  
-and-plug assembly in polyvinyl acetal foam, hydrophobic, casing**

Patent Assignee: TEMCA CHEM UNION GM (TEMC-N); VD LEHR A (VLEH-I)

Inventor: FIEDLER H; LEHR A

Number of Countries: 008 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2754807	A	19790613				197925 B
SE 7806217	A	19790709				197930
FR 2410999	A	19790810				197938
GB 1592543	A	19810708				198128
CH 627072	A	19811231				198206
DE 2754807	C	19820311				198211
CA 1119754	A	19820316				198215
AT 7802899	A	19820415				198218
JP 54086997	A	19790710				198635

Priority Applications (No Type Date): DE 2754807 A 19771209

Abstract (Basic): DE 2754807 A

Magnetic closure for an artificial **intestinal** outlet comprises a **ring magnet implanted** at the outlet, with which a permanently or temporarily **magnetic plug** is associated. The plug is exchangeably fitted into an open-cellular polyvinylacetal foam envelope whose inner surfae has been rendered hydrophobic wiht a silicone.

The closure can be **implanted** in alignment with a user's abdominal wall and affords a hygienically unimpeachable device of prolonged reliable efficacy

Derwent Class: A96; P32

International Patent Class (Additional): A61F-001/00; A61F-005/44

14/7/10 (Item 10 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

002128190

WPI Acc No: 1979-E8121B/197922

**Abdominal body opening sealing member - has in-line magnets lying axially  
on either side of body magnet**

Patent Assignee: COLOPLAST INT A/S (COLO-N)

Inventor: LARSEN H O; SAERENSEN E L; WOLFF P

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2007983	A	19790531				197922 B
US 4258705	A	19810331				198116
GB 2007983	B	19820623				198225

Priority Applications (No Type Date): GB 7846862 A 19781201; GB 7737836 A 19770910

Abstract (Basic): GB 2007983 A

To provide in an artificial **intestinal** or **urethral** opening (12) in an abdominal wall, a resilient sealing member (21) is held in place by **magnetic forces**. A **ring** or **ring-link** segmental **magnet** (14) is **implanted** in the body (10) around the opening. The member contains two or more **magnets** (37-39) in line.

The in-line **magnets**, when axially straddling the **ring magnet**, prevent tilting of the member. Two **magnets** in line have their pole

orientation identical. If three magnets are used, one is reversed.  
Derwent Class: P31; P32  
International Patent Class (Additional): A61B-019/00; A61F-005/44

14/7/11 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

001682923

WPI Acc No: 1977-B9396Y/197710

Bladder outlet valve for incontinent people - has magnet cone embedded in magnet ring seat with powerful external opening magnet

Patent Assignee: HENNIG G (HENN-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2537506	A	19770303				197710 B

Priority Applications (No Type Date): DE 2537506 A 19750822

Abstract (Basic): DE 2537506 A

The bladder outlet valve is magnetically controlled for incontinent people. The valve seat (2) is implanted inside the bladder (1) near the mouth of the urethra (3) and is rigidly fixed to the inner wall of the bladder. A spherical, conical or leaf shaped valve body (4) rests on the valve seat (2) and contains a permanent or soft magnet (5) attracted to at least one other ring magnet (b) which is embedded in the valve seat (2), keeping the valve closed. A very strong external magnet (7) is used to open the valve.

The permanent magnetic material used has a specific energy value of at least 100 mw/cm<sup>3</sup> and a retentivity of at least 4000 A/cm: The bladder valve involves insertion of only a minimum of foreign material directly inside the bladder and the valve seat can be made e.g. of tissue-compatible silicone

Derwent Class: P32

International Patent Class (Additional): A61F-001/00

14/7/12 (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

001327168

WPI Acc No: 1975-M1096W/197545

Colostomy or ileostomy aperture closing device - has nearby permanent magnet working with other magnets closing aperture

Patent Assignee: HENNIG G (HENN-I)

Number of Countries: 005 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2255044	A	19750822				197545 B
DK 7406655	A	19750818				197545
SE 7505093	A	19760315				197615
DE 2447682	A	19760408				197616
DE 2447682	B	19770608				197724
IT 1058300	B	19820410				198230

Priority Applications (No Type Date): DE 2447682 A 19741007; DE 2363563 A 19731220; GB 7436341 A 19740819; DE 2537573 A 19750822

Abstract (Basic): FR 2255044 A

The device is for use by a patient having an artificial anus, and incorporates one or more permanent **magnets** for mounting in the area of the **intestinal** aperture, working with one or more other **magnets** or soft **magnetic** components to close it. The permanent **magnet** can be of the **annular** type, or a set of **magnets** in a **ring** pattern, fixed to the inside of the abdominal wall round the **intestine**, while a mating component of ferrous material of suitable dimensions is attached to a disposable sack or a sealing hood. The **implanted magnetic** portion can be encased in silicon, polyethylene, or any other material acceptable to human tissue.

Derwent Class: P32

International Patent Class (Additional): A61F-005/44

16/7/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

007253106

WPI Acc No: 1987-250113/198735

**Magnetic artificial anus with sphincter function - has flexible structure giving added security of operation**

Patent Assignee: MEITO SANGYO KK (MEIT ); ODAJIMA H (ODAJ-I)

Inventor: YAMAGUUGHI T

Number of Countries: 006 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8704918	A	19870827	WO 87JP119	A	19870224	198735 B
US 4904256	A	19900227	US 87130382	A	19871020	199015

Priority Applications (No Type Date): JP 8637448 A 19860224

Cited Patents: DE 2363563; DE 2447682; DE 2754807; DK 139335; DK 665574; FR 2255044; FR 2410999; GB 1471158; GB 1592543; JP 51022296; JP 54086997; SE 7505093; SE 7806217; US 3952726

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 8704918	A	J	12		
------------	---	---	----	--	--

Designated States (National): DK US

Designated States (Regional): DE FR GB SE

Abstract (Basic): WO 8704918 A

The **magnetic** artificial anus with **sphincter** function comprises an **annular** bag structure (1) made of biocompatible flexible material filled with **magnetic** fluid and a plug structure (2) made of **magnetic** material and complete with a cap (2') and a stem portion .

In use, the **annular** bag is **implanted** between fascia (8) and peritoneum (9) so as to surround the artificial anus wall (3) into which the plug structure is inserted. The combination of flexible structure and **magnetic sphincter** function provides a level of security not available in the conventional hard **magnet** versions.

1/5

Abstract (Equivalent): US 4904256 A

The **implantable magnetic** artificial anus has **sphincter** functions comprising a flexible **annular** hollow bag formed of a bioaffinitive flexible film having a film thickness of 0.1 to 0.5 mm and filled with a **magnetic** fluid. A plug member has in combination a cylindrical body defining upper and lower ends, and an umbrella shaped cap integral with the upper end. The cylindrical body has a permanent **magnet** and the body has a hollow ventilation chamber extending from



the upper to the lower end.

The ventilation chamber has gas permeating filters disposed at each end and the chamber is filled with gas permeating material. The **annular** bag is disposed about the periphery of a natural or artificial colon and the cylindrical body of the plug member is inserted into the colon directly adjacent the **annular** bag. (8pp)

Derwent Class: P32

International Patent Class (Additional): A61F-002/48; A61F-005/44

16/7/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

001959147

WPI Acc No: 1978-J8420A/197845

**Intestine closing plug with implanted permanent magnet - has envelope made of material which expands under influence of moisture and heat**

Patent Assignee: WILLITAL G (WILL-I)

Inventor: HENNIG G

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2717608	A	19781102				197845 B
DE 2717608	C	19851003				198541

Priority Applications (No Type Date): DE 2717608 A 19770420; DE 2722286 A 19770517

Abstract (Basic): DE 2717608 C

The envelope of the plug is made of a material which expands after it is inserted into the **intestine**. This envelope is pref. made from pressed cellulose. The material can expand due to moisture or heat. Ends of the plug have material which expands more than the material at plug mid length.

The plug expanding envelope can be split diametrically and also at mid length. In this case the plug is enclosed by a covering sock. The **magnetic** plug is **embedded** in the centre of the plug.

DE 2717608 A

The envelope of the plug is made of a material which expands after it is inserted into the **intestine**. This envelope is pref. made from pressed cellulose. The material can expand due to moisture or heat. Ends of the plug have material which expands more than the material at plug midlength.

The plug expanding envelope can be split diametrically and also at midlength. In this case the plug is enclosed by a covering sock. The **magnetic** plug is **embedded** in the centre of the plug.

Derwent Class: P32

International Patent Class (Additional): A61F-005/44

16/7/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

001956939

WPI Acc No: 1978-J6212A/197844

**Intestinal opening magnetic plug - consists of foam plastics sleeve in opening, containing magnet , and magnets embedded near opening**

Patent Assignee: COLOPLAST A/S (COLO ); COLOPLAST INT A/S (COLO-N); HENNIG

G (HENN-I)

Inventor: WILLITAL G

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2717607	A	19781026				197844 B
US 4154226	A	19790515				197922
DE 2717607	B	19800918				198039

Priority Applications (No Type Date): DE 2717607 A 19770420; DE 2722286 A 19770517

Abstract (Basic): DE 2717607 A

The body **implant** to close an **intestinal** opening includes permanent **magnets** (28) **embedded** near the opening. A foamed plastics cylinder (24), closed one end, is inserted in the opening itself. A cylindrical **magnet** (14") is then inserted into the interior of the cylinder.

This **magnet** is pulled into the interior by a draw cord (20) attached to its nose end, the cord passing through a hole through the closed end of the cylinder (24). The sleeve is used once only. The inner **magnet** has a gas escape hole through it, and is enclosed by a plastics covering

Derwent Class: P31; P32

International Patent Class (Additional): A61B-019/00; A61F-005/44

16/7/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

001893484

WPI Acc No: 1978-C2724A/197811

**Artificial sphincter - ensures atraumatic usage after implant with clamp featuring cantilever magnet and a flexible core**

Patent Assignee: KUZNETSOV M B (KUZN-I)

Inventor: KUZNETSOV M V; LIVSHITS A V; STEPANOV L V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 558672	A	19770624				197811 B

Priority Applications (No Type Date): SU 2318408 A 19760126

Abstract (Basic): SU 558672 A

The artificial **sphincter** for the restoration of volitional control of urination ensures a traumatic operation immediately after this **implantation**. The clamp is in the form of a yoke with cantilever ends carrying permanent **magnets** (2). The latter are interconnected by the flexible **magnetic** core (3) which holds the control winding (4).

The size of the elastic yoke (1) and of **magnets** (2) is selected to ensure two stable positions of the clamp when winding (4) is deenergised. In the **compressed** state the mutual pull of the **magnets** exceeds the spread **force** of the yoke (1) so that the **urethra** is pinched off. In the relaxed position the **force** of yoke (1) is greater than the pull of the **magnets** and the **urethra** is relieved from clamping. A short d.c. pulse in winding (4) trips the clamp from one state to the other one when the **sphincter** operates like a polarised relay. The pulse is fed from outside by a transmitting coil using a circuit for frequency separation to alter the direction of the **magnetising force**. Release of the **urethra** for longer periods reduces the traumatic effect.

The **sphincter** is made up of the elastic yoke (1) with ends featuring permanent **magnets** (2) linked by the flexible **magnetic** core (3) which holds the control winding (4). The top of the **sphincter** has loops (5) for suturing to the periosteum of the pubic bone. The **sphincter** is implanted 15-20 mm. beneath the skin to pinch off the **urethra**

Derwent Class: P31

International Patent Class (Additional): A61B-019/00

17/3/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

017752143 \*\*Image available\*\*

WPI Acc No: 2006-263423/200627

XRFX Acc No: N06-225574

**Biomechanical micro sensor system for dynamic measuring and recording of tissue motion in physiologic process and surgical procedure, has data processing device which determines magnitude and direction of ciliary body movement**

Patent Assignee: UNIV OHIO STATE (OHIS )

Inventor: MC CALLUM G A; ROBERTS C J

Number of Countries: 112 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200634336	A1	20060330	WO 2005US33802	A	20050921	200627 B

Priority Applications (No Type Date): US 2004611828 P 20040921

17/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

016569836

WPI Acc No: 2004-728573/200471

Related WPI Acc No: 2004-226230; 2004-247170; 2004-247171; 2004-269486; 2005-425163

XRFX Acc No: C04-256032

XRFX Acc No: N04-577052

**Implant useful for treatment of sleep disordered breathing comprises a biocompatible polymer matrix sized and configured to be implanted in animal tissue and magnetic particles magnetized to a desired polarity; bound with the matrix**

Patent Assignee: APNEON INC (APNE-N)

Inventor: BOUCHER R; DOELLING E N; JONES L R; LIU J; NELSON L M; STINE G; DOELLING E; JONES L; NELSON L; BOUCHER R P; STINE J G

Number of Countries: 109 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200484709	A2	20041007	WO 2004US8635	A	20040322	200471 B
US 20050004417	A1	20050106	US 2003456164	P	20030320	200504
			US 2004806372	A	20040322	
EP 1613251	A2	20060111	EP 2004757970	A	20040322	200604
			WO 2004US8635	A	20040322	
AU 2004224331	A1	20041007	AU 2004224331	A	20040322	200611

Priority Applications (No Type Date): US 2003718254 A 20031120; US 2003456164 P 20030320; US 2003656861 A 20030906; US 2004806372 A 20040322

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200484709 A2 E 79 A61B-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ  
CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID  
IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ  
NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ  
UA UG US UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR  
GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ  
TR TZ UG ZM ZW

US 20050004417 A1 A61F-002/04 Provisional application US 2003456164

EP 1613251 A2 E A61F-005/56 Based on patent WO 200484709

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB  
GR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR

AU 2004224331 A1 A61F-005/56 Based on patent WO 200484709

Abstract (Basic):

... The **implant** resists collapse of the tissue region of at least one **pharyngeal** structure or at least one anatomic component within a **pharyngeal** conduit, responsible for causing airway collapse and increased airway resistance associated with the entire spectrum of obstructive sleep-disordered breathing. The size and configuration of the **implanted** structures are selected to provide ease and bio-comfort, but to provide sufficient static and...  
...tissue collapse when imminent. Compared to the prior art continuous positive airway **pressure** machines, the **implants** are not cumbersome to wear and travel with, easier to accept on a social level...  
...improved long-term compliance rate. The **magnetic force** systems provide repelling **force** between opposing tongue **magnet** (s) and **pharyngeal** wall **magnet** (s) having strength sufficient to remodel native tissue conditions within the airway. The repelling **force**...  
...the tissue that if left unaltered could lead to tissue collapse during respiratory cycle. The **magnets** of the **implants** of the system thus establish tissue conditions that fixate or brace the tissue to resist collapse along the **pharyngeal** conduit when imminent i.e. during sleep; without significantly stiffening the native tissue at times...  
...pull the tissue, and without indiscriminate dampening the **spring** constant of native tissue in the **pharyngeal** conduit, thus imparts improved comfort, tolerance and bio-acceptance...

17/3,K/13 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

010491529 \*\*Image available\*\*

WPI Acc No: 1995-392930/199550

XRPX Acc No: N95-286472

**Magnetically coupled implantable medical device e.g artificial pump for urine or blood - has implantable magnet mounted for rotation by magnetically coupling with external drive magnet and mechanically coupled to implantable medical device e.g blood pump**

Patent Assignee: INFLUENCE INC (INFL-N); INFLUENCE MEDICAL TECHNOLOGIES LTD (INFL-N); SRS MEDICAL SYSTEMS INC (SRSM-N)

Inventor: SOHN Z

Number of Countries: 021 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9529716	A1	19951109	WO 95US5402	A	19950502	199550 B
AU 9524646	A	19951129	AU 9524646	A	19950502	199609
EP 758254	A1	19970219	EP 95918894	A	19950502	199713
			WO 95US5402	A	19950502	
JP 10504469	W	19980506	JP 95528473	A	19950502	199828
			WO 95US5402	A	19950502	
US 5762599	A	19980609	US 94236448	A	19940502	199830
AU 695987	B	19980827	AU 9524646	A	19950502	199846
JP 3070690	B2	20000731	JP 95528473	A	19950502	200041
			WO 95US5402	A	19950502	
US 6417750	B1	20020709	US 94236448	A	19940502	200253
			US 9812698	A	19980123	
			US 99422416	A	19991021	
CA 2189423	C	20020806	CA 2189423	A	19950502	200260
			WO 95US5402	A	19950502	

Priority Applications (No Type Date): US 94236448 A 19940502; US 9812698 A 19980123; US 99422416 A 19991021

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 9529716	A1 E	34	A61M-001/12	Designated States (National): AU CA JP Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
AU 9524646	A		A61M-001/12	Based on patent WO 9529716
EP 758254	A1 E	34	A61M-001/12	Based on patent WO 9529716 Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
JP 10504469	W	53	A61M-001/00	Based on patent WO 9529716
US 5762599	A		A61M-001/00	
AU 695987	B		A61M-001/12	Previous Publ. patent AU 9524646 Based on patent WO 9529716
JP 3070690	B2	11	A61M-001/00	Previous Publ. patent JP 10504469 Based on patent WO 9529716
US 6417750	B1		H01H-009/00	Cont of application US 94236448 Cont of application US 9812698 Cont of patent US 5762599
CA 2189423	C E		A61M-001/12	Based on patent WO 9529716 ...Abstract (Basic): USE/ADVANTAGE - Artificial pump for <b>implantation</b> in <b>urethra</b> for pumping urine from bladder, for <b>implantation</b> into aorta to pump blood for assisting failing or recovering heart and for <b>implantation</b> into blood vessel to aid blood circulation ischemic leg. Provides flexibility in design and dimensions of <b>implanted</b> driven <b>magnet</b> , and in speed and torque ratios between two <b>magnets</b> .

17/3,K/21 (Item 21 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 The Thomson Corp. All rts. reserv.  
001765544  
WPI Acc No: 1977-L2059Y/197751

Anal closure with implanted magnet assembly - has plug contg. second magnet assembly in pin shaped attachment

Patent Assignee: COLOPLAST A/S (COLO-N); HENNIG G (HENN-I)  
Number of Countries: 001 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2625234	A	19771215				197751 B
DE 2625234	C	19861002				198640

Priority Applications (No Type Date): DE 2625234 A 19760604

...Abstract (Basic): Anal closure comprises a first **implantable magnet** assembly contg. two or more **magnet** systems (16, 18) which are spaced apart in the longitudinal direction of the **intestine** . A plug (12) comprises a sealing surface, and a pin shaped attachment contg. a second **magnet** assembly (22...

17/3,K/22 (Item 22 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 The Thomson Corp. All rts. reserv.  
001709495  
WPI Acc No: 1977-E5983Y/197722

Filamentary magnetic material body implant - uses platinum cobalt alloy or gold contg. embedded magnetic particles and wound on spool

Patent Assignee: BUCALO L (BUCA-I)  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4024855	A	19770524				197722 B

Priority Applications (No Type Date): US 75633015 A 19751118; US 74537572 A 19741230

...Abstract (Basic): **magnet** particles **embedded**. The permanent **magnet** structure (50) can be **implanted** one side of a **body passage** (44) and a non-permanent but **magnetic** material structure (48) on the other side. Normally the attractive **force** of the permanent **magnet** structure will hold the **passage** shut but if the non-permanent **magnetic** structure is **magnetised** externally the **force** of repulsion will open the **passage** to allow fluid flow.

# INVENTORS

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200636  
 File 349:PCT FULLTEXT 1979-2006/UB=20060601,UT=20060525  
 File 348:EUROPEAN PATENTS 1978-2006/ 200622

Set	Items	Description
S1	94	AU='DEEM M' OR AU='DEEM M E' OR AU='DEEM MARK' OR AU='DEEM MARK E'
S2	209	AU='GIFFORD H' OR AU='GIFFORD H S' OR AU='GIFFORD H S I':AU='GIFFORD HANSON SMILEY III' OR AU='GIFFORD I H S':AU='GIFFORD III HANSON SMILEY'
S3	115	AU='ANDREAS B' OR AU='ANDREAS B H' OR AU='ANDREAS B J' OR - AU='ANDREAS BERNARD':AU='ANDREAS BERNHARD H'
S4	18	AU='CHEW SUNMI' OR AU='CHEW SUNMI K' OR E3OR E7
S5	56	AU='FRENCH R'
S6	48	AU='FRENCH RON' OR AU='FRENCH RONALD' OR AU='FRENCH RONALD G' OR AU='FRENCH RONALD J' OR AU='FRENCH R G' OR AU='FRENCH R J'
S7	35	AU='SUTTON D'
S8	49	AU='SUTTON DOUG' OR AU='SUTTON DOUGLAS' OR AU='SUTTON DOUGLAS E':AU='SUTTON DOUGLAS S'
S9	37	AU='SUTTON D E' OR AU='SUTTON D S'
S10	2434	IC=A61B-017/08
S11	631566	MAGNET?
S12	109658	MAGNETIZ? OR MAGNETIS?
S13	1305556	LUMEN? ? OR LUMENAL OR LUMINAL OR LUMIN? ? OR SPHINCTER? ? OR LES OR URETHRA? ?
S14	11	S1:S9 AND S11:S12 AND S13
S15	1	S10 AND S14
S16	11	IDPAT S14 (sorted in duplicate/non-duplicate order)
S17	7	IDPAT S14 (primary/non-duplicate records only)

17/3,AB,IC/1 (Item 1 from file: 350)  
 DIALOG(R)File 350:Derwent WPIX  
 (c) 2006 The Thomson Corp. All rts. reserv.  
 015933368  
 WPI Acc No: 2004-091209/200409  
 XRPX Acc No: N04-073055

Body lumen augmenting method for gastroesophageal reflux disease, involves energizing two magnetic devices to constrict lumen , where magnetic devices are placed at preselected location in wall of body lumen

Patent Assignee: FOUNDRY INC (FOUN-N); ANDREAS B (ANDR-I); CHEW S (CHEW-I); DEEM M E (DEEM-I); FRENCH R (FREN-I); GIFFORD H S (GIFF-I); SUTTON D (SUTT-I)

Inventor: ANDREAS B ; CHEW S; DEEM M ; FRENCH R ; GIFFORD I H S ; SUTTON D ; GIFFORD H S ; DEEM M E

Number of Countries: 106 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200404544	A2	20040115	WO 2003US21167	A	20030702	200409 B
US 20040122470	A1	20040624	US 2002393624	P	20020702	200442
			US 2003612325	A	20030701	
AU 2003281342	A1	20040123	AU 2003281342	A	20030702	200459
EP 1517726	A2	20050330	EP 2003742434	A	20030702	200522
			WO 2003US21167	A	20030702	

JP 2005532117 W 20051027 WO 2003US21167 A 20030702 200571  
JP 2004519943 A 20030702  
AU 2003281342 A8 20051027 AU 2003281342 A 20030702 200624  
Priority Applications (No Type Date): US 2002393624 P 20020702; US  
2003612325 A 20030701

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200404544 A2 E 18 A61B-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO  
NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ  
VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ  
UG ZM ZW

US 20040122470 A1 A61B-017/08 Provisional application US 2002393624

AU 2003281342 A1 A61B-000/00 Based on patent WO 200404544

EP 1517726 A2 E A61N-002/00 Based on patent WO 200404544

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB  
GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

JP 2005532117 W 13 A61B-017/00 Based on patent WO 200404544

AU 2003281342 A8 A61N-002/00 Based on patent WO 200404544

Abstract (Basic): WO 200404544 A2

Abstract (Basic):

NOVELTY - The method involves inserting a catheter (20) having a delivery tube (24) into the body lumen . The catheter is advanced to a position such that the delivery tube is near a preselected location. Two magnetic devices (26) placed in the delivery tube are implanted within a wall of the body lumen at the preselected location. The magnetic devices are attracted when energized to constrict the lumen.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a device for treating sphincter in the body lumen of a patient.

USE - Used for treating gastroesophageal reflux disease.

ADVANTAGE - The attraction between the magnetic devices upon energizing constricts the lumen , thereby increasing the tone and pressure within the esophagus, thus helping to augment the natural function of the lower esophageal sphincter .

DESCRIPTION OF DRAWING(S) - The drawing shows a frontal, cross-sectional view of an esophagus and stomach with magnetic particles placed in the wall of the esophagus.

Esophagus wall (12)

Stomach (14)

Catheter (20)

Delivery tube (24)

Magnetic devices (26)

pp; 18 DwgNo 2/3

International Patent Class (Main): A61B-000/00; A61B-017/00; A61B-017/08;  
A61N-002/00

International Patent Class (Additional): A61F-002/02; A61M-037/00

17/3,AB,IC/5 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2006 WIPO/Univentio. All rts. reserv.

01012107



**ACTIVE PUMP BRONCHIAL IMPLANT AND METHODS OF USE THEREOF**  
**POMPE BRONCHIQUE ACTIVE IMPLANTABLE ET METHODES D'UTILISATION**

Patent Applicant/Assignee:

EMPHASYS MEDICAL INC, 2686 Middlefield Road, Suite A, Redwood City, CA  
94063, US, US (Residence), US (Nationality), (For all designated states  
except: US)

Patent Applicant/Inventor:

GIFFORD Hanson S III, 3180 Woodside Road, Woodside, CA 94062, US, US  
(Residence), US (Nationality), (Designated only for: US)  
McCUTCHEON John G, 1790 Oak Avenue, Menlo Park, CA 94025, US, US  
(Residence), US (Nationality), (Designated only for: US)  
FIELDS Antony J, 87 Vicksburg Street, San Francisco, CA 94114, US, US  
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

SEIDMAN Stephanie L (et al) (agent), Fish & Richardson P.C., 12390 El  
Camino Real, San Diego, CA 92130, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200341779 A1 20030522 (WO 0341779)  
Application: WO 2002US36863 20021114 (PCT/WO US02036863)  
Priority Application: US 2001336233 20011114

Parent Application/Grant:

Related by Continuation to: US 2001336233 20011114 (CIP)

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class (v7): A61M-016/00

Publication Language: English

Filing Language: English

Fulltext Word Count: 14225

English Abstract

Disclosed is a pump device that can be implanted into a body passageway,  
such as into a bronchial passageway. The pump device can be used to pump  
fluid through the body passageway, such as in order to assist the  
expiration of fluid from a region of the lung that fluidly communicates  
with the body passageway. The pump device includes a housing that defines  
an internal chamber, wherein fluid can flow through the chamber. The  
housing is dimensioned for insertion into a bronchial passageway. The  
pump device also includes a fluid propulsion mechanism in fluid  
communication with the chamber. The fluid propulsion mechanism is  
positioned to propel fluid through the chamber so as to pump fluid  
through the bronchial passageway in a desired direction.

17/3,AB,IC/6 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2006 WIPO/Univentio. All rts. reserv.

00964092

**OBESITY TREATMENT TOOLS AND METHODS**

**INSTRUMENTS ET METHODES DE TRAITEMENT DE L'OBESITE**

**Patent Applicant/Assignee:**

SATIETY INC, 604-D Fifth Avenue, Redwood City, CA 94063, US, US  
(Residence), US (Nationality), (For all designated states except: US)

**Patent Applicant/Inventor:**

WELLER Gary, 15570 El Gato Lane, Los Gatos, CA 95032, US, US (Residence),  
US (Nationality), (Designated only for: US)

GERBI Craig, 515 Villa Street, Mountain View, CA 94041, US, US  
(Residence), US (Nationality), (Designated only for: US)

GANNOE James, 2877 Blenheim Avenue, Redwood City, CA 94063, US, US  
(Residence), US (Nationality), (Designated only for: US)

DEEM Mark E , 685 Sierra Avenue, Mountain View, CA 94041, US, US  
(Residence), US (Nationality), (Designated only for: US)

SUTTON Douglas S , 1595 Adobe Drive, Pacifica, CA 94044, US, US  
(Residence), US (Nationality), (Designated only for: US)

GIFFORD Hanson S III , 3180 Woodside Road, Woodside, CA 94062, US, US  
(Residence), US (Nationality), (Designated only for: US)

ANDREAS Bernard H , 633 California Way, Redwood City, CA 94062, US, US  
(Residence), US (Nationality), (Designated only for: US)

FRENCH Ronald G , 1564 Heatherdale Avenue, Santa Clara, CA 95050, US, US  
(Residence), US (Nationality), (Designated only for: US)

**Legal Representative:**

HAN Johny U (et al) (agent), Morrison & Foerster, LLP, 755 Page Mill  
Road, Palo Alto, CA 94304-1018, US,

**Patent and Priority Information (Country, Number, Date):**

Patent: WO 200296327 A2 20021205 (WO 0296327)

Application: WO 2002US17077 20020529 (PCT/WO US0217077)

Priority Application: US 2001871297 20010530; US 2002155362 20020523

**Designated States:**

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class (v7): A61F-005/00

International Patent Class (v7): A61B-017/064; A61B-019/00

Publication Language: English

Filing Language: English

Fulltext Word Count: 14550

File 155:MEDLINE(R) 1951-2006/Jun 07  
(c) format only 2006 Dialog  
File 5:Biosis Previews(R) 1969-2006/Jun W1  
(c) 2006 The Thomson Corporation  
File 73:EMBASE 1974-2006/Jun 08  
(c) 2006 Elsevier Science B.V.  
File 34:SciSearch(R) Cited Ref Sci 1990-2006/May W4  
(c) 2006 Inst for Sci Info  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info

Set	Items	Description
S1	6579	AU=(DEEM M? OR GIFFORD I? OR GIFFORD H? OR ANDREAS B? OR C- HEW S? OR FRENCH R? OR SUTTON D?)
S2	1545800	MAGNET?
S3	708714	LUMEN? ? OR LUMINAL OR SPHINCTER OR URETHRA? ? OR CAVITY OR CAVITIES
S4	4	S1 AND S2 AND S3
S5	4	RD (unique items)
S6	100	S1 AND S2
S7	96	S6 NOT S4
S8	60	RD (unique items)
S9	1071066	S2/TI,DE
S10	37	S8 AND S9
S11	37	Sort S10/ALL/PY,A [not relevant]

5/7/2 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2006 The Thomson Corporation. All rts. reserv.  
0014307246 BIOSIS NO.: 200300265890  
**Obesity treatment tools and methods**  
AUTHOR: Deem Mark E (Reprint); Sutton Douglas S ; Gifford Hanson S ;  
Andreas Bernard H ; French Ronald G  
AUTHOR ADDRESS: Mountain View, CA, USA\*\*USA  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1270 (1): May 6, 2003 2003  
MEDIUM: e-file  
ISSN: 0098-1133 \_(ISSN print)  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English  
ABSTRACT: Various obesity treatment tools and methods are described herein,  
as well as treatments for other gastric-related diseases, e.g., GERD.  
Treatment includes reducing the size of the stomach pouch to limit the  
caloric intake as well as to provide an earlier feeling of satiety. This  
may be done by creating a smaller gastric pouch within the stomach  
directly from the interior of the stomach itself. The smaller pouches may  
be made through the use of individual anchoring devices, rotating probes,  
or volume reduction devices. A pyloroplasty procedure may also be  
performed to render the pyloric sphincter incompetent. A gastric bypass  
procedure may additionally be performed using atraumatic magnetic  
anastomoses devices so that sugars and fats are passed directly to the  
bowel while bypassing the stomach. Many of these procedures may be done  
in a variety of combinations. Treatment may create enforced behavioral  
modifications by discouraging the ingestion of high-caloric foods.